Attorney Docket No.: 103-204-US



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: De Maria et al.

Confirmation No: 5078

Serial No.: 10/537,746

Group Art Unit: To be a

Filed: June 6, 2005

Examiner: To be assigned

For: Galactanase Variants

CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

Mail Stop Sequence Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

I hereby certify that the attached correspondence comprising:

- 1. Response to Notice to Comply with Sequence Rules
- 2. Sequence Listing
- 3. Disk Containing Sequence Listing
- 4. Copy of Notice to Comply with Sequence Rules

is being deposited with the United States Postal Service as first class mail in an envelope addressed to the address indicated above on January 4, 2006.

Julie Tabarovsky

(name of person mailing paper)

(signature of person mailing paper)



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 10/537,746 Leonardo De Maria 10319.204-US INTERNATIONAL APPLICATION NO. PCT/DK03/00851 25908 I.A. FILING DATE PRIORITY DATE NOVOZYMES NORTH AMERICA. INC 12/11/2003 12/20/2002 500 FIFTH AVENUE **SUITE 1600** NEW YORK, NY 10110 **CONFIRMATION NO. 5078 371 FORMALITIES LETTER** OC000000017366196* Date Mailed: 11/04/2005

NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$-1000 for a Large Entity:

• The paper or compact disc copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e). Applicant must provide a substitute paper or compact disc copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the application OR a substitute computer readable form (CRF) copy of the "Sequence Listing". These two items must be the same. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).

(A previous payment of \$1000 will be applied to the additional fees indicated above.)

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS: http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/24/05



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/537,746

DATE: 06/14/2005 TIME: 09:17:55

Input Set : A:\01-SQ Listing-06 Jun 2005.txt
Output Set: N:\CRF4\06142005\J537746.raw

- 3 <110> APPLICANT: De Maria, Leonardo
- 4 Svendsen, Allan
- 5 Borchert, Torben Vedel
- 6 Christensen, Lars Lehmann Hylling
- 7 Larsen, Sine
- 8 Ryttergaard, Carsten
- 10 <120> TITLE OF INVENTION: Galactanase Variants
- 12 <130> FILE REFERENCE: 10319.204-US
- C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/537,746
- C--> 14 <141> CURRENT FILING DATE: 2005-06-06
 - 14 <160> NUMBER OF SEQ ID NOS: 9
 - 16 <170> SOFTWARE: PatentIn version 3.3

Oces Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

- 645 <210> SEQ ID NO: 9
- 646 <211> LENGTH: 359
- 647 <212> TYPE: PRT
- 648 <213> ORGANISM: Pseudomonas fluorscens
- 651 <220> FEATURE:
- 652 <221> NAME/KEY: mat_peptide
- 653 <222> LOCATION: (1)..()
- 655 <400> SEQUENCE: 9
- 657 Asn Thr Gly Val Ala Asp Asn Thr Pro Phe Tyr Val Gly Ala Asp Leu
 - 5 10 15
- 661 Ser Tyr Val Asn Glu Met Glu Ser Cys Gly Ala Thr Tyr Arg Asp Gln 662 20 25 30
- 665 Gly Lys Lys Val Asp Pro Phe Gln Leu Phe Ala Asp Lys Gly Ala Asp
- 666 35 40 45
- 669 Leu Val Arg Val Arg Leu Trp His Asn Ala Thr Trp Thr Lys Tyr Ser
- 673 Asp Leu Lys Asp Val Ser Lys Thr Leu Lys Arg Ala Lys Asn Ala Gly
- 674 65 70 75 80
- 677 Met Lys Thr Leu Leu Asp Phe His Tyr Ser Asp Thr Trp Thr Asp Pro 678 85 90 95
- 681 Glu Lys Gln Phe Ile Pro Lys Ala Trp Ala His Ile Thr Asp Thr Lys
- 682 100 105 110 685 Glu Leu Ala Lys Ala Leu Tyr Asp Tyr Thr Thr Asp Thr Leu Ala Ser 686 115 120 125
- 686 115 120 125 689 Leu Asp Gln Gln Gln Leu Leu Pro Asn Leu Val Gln Val Gly Asn Glu 690 130 135 140
- 693 Thr Asn Ile Glu Ile Leu Gln Ala Glu Asp Thr Leu Val His Gly Ile



RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/537,746

DATE: 06/14/2005 TIME: 09:17:55

Input Set : A:\01-SQ Listing-06 Jun 2005.txt
Output Set: N:\CRF4\06142005\J537746.raw

		145					150					155					160
_	698					165	•		Thr		170					175	
	701 702	Val	Arg	Asp	Tyr 180	Ser	Lys	Lys	Thr	Gly 185	Lys	Pro	Ile	Gln	Val 190	Val	Leu
	705 706	His	Ile	Ala 195	Gln	Pro	Glu	Asn	Ala 200	Leu	Trp	Trp	Phe	Lys 205	Gln.	Ala	Lys
	709 710	Glu	Asn 210	Gly	Val	Ile	Asp	Tyr 215	Asp	Val	Ile	Gly	Leu 220	Ser	Tyr	Tyr	Pro
	713 714	Gln 225	Trp	Ser	Glu	Tyr	Ser 230	Leu	Pro	Gln	Leu	Pro 235	Asp	Ala	Ile	Ala	Glu 240
	717 718	Leu	Gln	Asn	Thr	Tyr 245	His	Lys	Pro	Val	Met 250	Ile	Val	Glu	Thr	Ala 255	
	721 722	Pro	Trp	Thr	Leu 260	His	Asn	Phe	Asp	Gln 265	Ala	Gly	Asn	Val	Leu 270	Gly	Glu
	725 726	Lys	Ala	Val 275	Gln	Pro	Glu	Phe	Pro 280	Ala	Ser	Pro	Arg	Gly 285	Gln	Leu	Thr
	729 730	Tyr	Leu 290	Leu	Thr	Leu	Thr	Gln 295	Leu	Val	Lys	Ser	Ala 300		Gly	Met	Gly
	733 734	Val 305	Ile	Tyr	Trp	Glu	Pro 310	Ala	Trp	Val	Ser	Thr 315	Arg	Cys	Arg	Thr	Leu 320
	737 738	Trp	Gly	Lys	Gly	Ser 325	His	Trp	Glu	Asn	Ala 330	Ser	Phe	Phe	Asp	Ala 335	Thr
	741 742	Arg	Lys	Asn	Asn 340	Ala	Leu	Pro	Ala	Phe 345	Leu	Phe	Phe	Lys	Ala 350	Asp	Tyr
	746/	Gln	Ala	Ser 355	Ala	Gln	Ala	Glu							-		
>	752	1	,	(e)	Le	/											
				· · ·													

10/537,746

<211> 21 Invalid <212> synthetic <213> Response <220>

<221>... misc feature

<223> Primer

<400> 5

-catttggaca acggctggag c

M Andatory,

2137 response 21 has to be either Artificial) UNKNOWN OR

Genus | species,

on error sheet.

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/537,746

DATE: 06/14/2005 TIME: 09:17:56

Input Set : A:\01-SQ Listing-06 Jun 2005.txt
Output Set: N:\CRF4\06142005\J537746.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:752 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:9

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: $10/537,746$
ATTN: NEW RULES CASES	: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARI
IWrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentln 2.0 "bug"	A "bug" in Patentln version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Patentln would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW PULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid